

In the claims:

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1. (Previously Presented) A computer system comprising:

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- a. at least one extensible transaction database for storing flexible representations of product definitions;
  - b. at least one system controller for selectively retrieving ~~and comparing~~ the stored flexible representation of the product definition; and
  - c. ~~an plurality of interactive scripts, wherein said interactive scripts include for~~ presenting to a product vendor an options to refine the flexible representation of the product definition based upon actual purchase transaction data, including: selecting for entry either the retrieved data or to further refine the flexible representation, until flexible representation of the offered product represents one or a combination of multiple commoditized sellable units; and
  - d. ~~a pricing script that allows the vendor to associate the flexible representation of the offered product representing one or a combination of multiple commoditized sellable units with prices to create an offer for sale.~~

2. (Previously Presented) The computer system of Claim 1 where the system controller further comprises:

- a. means for ~~retrieving all~~ comparing one or more commoditized sellable units with represented by the flexible representations stored in the at least one extensible transaction ~~vendor database for storing flexible representations of vendor definitions that correspond either alone or in combination~~ with other commoditized sellable units derived from vendor offers. ~~to conform to a purchaser's inquiry;~~
- b. ~~a associating means for creating associations between at least one of the flexible representations of product definitions stored in vendor database and calculating the price to create an offer for sale; and,~~

~~e. at least one editor means for entering or changing flexible representations of vendor definitions.~~

3. (Currently Amended) A method comprising:

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- a. providing a customer database comprising names and purchasing habits ~~of a multiplicity~~ of customers;
  - b. providing a transaction database comprising definitions of ~~a multiplicity of~~ products, the appropriate sales unit for ~~each of the multiplicity of items~~ the products, and, a unique ~~variable~~ identifier associated with ~~each~~ the products;
  - c. ~~receiving~~ analyzing ~~a multiplicity of~~ customer's bills ~~from a multiplicity of vendors; itself comprising: by the steps of:~~
    - i. ~~splitting~~ dissecting ~~each~~ the bills into component line item transactions;
    - ii. associating ~~each~~ the line item transactions with the corresponding product ~~variable~~ identifiers from the transaction database;
    - iii. determining the amount of ~~each~~ the products purchased in terms of their respective sales units;
    - iv. determining the ~~date~~ price of the line item transaction;
    - v. associating the line item transaction with the customer; and  
updating the purchase habit information for the customer in the customer database accordingly.

4. (Currently Amended) The method for compiling a customer database of Claim 3, further ~~wherein step a. additionally comprises:~~

- ~~vi. enrolling a customer, itself comprising:~~

1. ~~submitting a questionnaire comprising requests for identification and demographic data;~~
2. ~~reviewing customer's responses to the questionnaire;~~
3. ~~inputting customer's responses to the questionnaire; and,~~
4. ~~associating the inputted responses with a unique variable identifier;~~

vii. i. augmenting the customer data, ~~itself~~ comprising the steps of:

1. requesting the customer's consumer credit report from a credit reporting agency;
2. receiving the consumer credit report;
3. inputting the contents of the consumer credit report; and,

viii. ii. associating the inputted contents with the customer's unique variable identifier;

5. (Currently Amended) The method for compiling a customer database of Claim 3, additionally comprising:

- d. ~~determining a cycle length for periodic purchases;~~
- e. determining one or more demographic factors desirable for predicting purchase behavior; and
- f. analyzing the compiled purchase habit data associated with a customer for the presence of ~~each~~ one or more of the demographic factors.

6. (Currently Amended) The method of compiling a customer database of Claim [[4]] 5 , additionally comprising:

- g. identifying one or more specific demographic factors desirable for predicting purchase behavior that are not derived lacking from the compiled purchase habit data; obtaining such demographic factors from sources other than the compiled purchase habit data.

- ~~h. formulating questions related to the lacking demographic factors;~~
- ~~i. transmitting the questions to the customer; and~~
- ~~j. associating the customer responses with the unique variable identifier.~~

7. (Previously Presented) A method for facilitating electronic commerce between a ~~multiplicity~~ of customers and at least one ~~a multiplicity~~ of vendors, comprising:

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- a. creating a customer database, comprising the steps of:
    - i. enrolling ~~a multiplicity~~ of customers into a closed market;
    - ii. inputting a unique ~~variable~~ identifier to each one or more of the ~~multiplicity~~ of enrolled customers; and,
    - iii. creating an initial record containing the identity ~~and demographic information~~ for each one or more of the ~~multiplicity~~ of enrolled customers;
    - iv. recording purchase history data derived from actual purchases made by one or more enrolled customers and associating that data with their respective unique identifiers;
  - b. creating a transaction database; comprising the steps of:
    - i. ~~providing a commoditized definition for each of a multiplicity of~~ defining one or more of the products offered by each one or more of the ~~multiplicity~~ of vendors;
    - ii. creating a record corresponding to each one or more of the ~~multiplicity~~ of defined products;
    - iii. identifying a sales unit ~~quantity~~ appropriate to one or more of the products;
    - iv. inputting a unique ~~variable~~ identifier to one or more of the products; and
    - ~~v. sorting and categorizing one or more of the products according to categories comprising function, use and composition;~~
  - c. creating a vendor database, comprising the steps of:
    - i. creating a record corresponding to each ~~of a multiplicity of~~ one or more vendors;

- ii. inputting a unique ~~variable~~ identifier to each one or more of the ~~multiplicity~~ of vendors [[:]] .

~~d. recording all purchases; comprising:~~

- ~~i. identifying each customer who effected the purchase being recorded by each customer's unique variable identifier stored in the customer database;~~
- ~~ii. identifying the vendor, from the vendor database, from whom the customer effected the purchase by the vendor's unique variable identifier;~~
- ~~iii. splitting each purchase into component line items according to the provided commoditized definition;~~
- ~~iv. determining the number of sales units purchased in each component line item;~~
- ~~v. identifying each component line item by its unique variable identifier inputted in the transaction database;~~
- ~~vi. identifying a date for each purchase; and,~~
- ~~vii. inputting a relational instance in the customer database, comprising:~~
- ~~(A) the customer's unique variable identifier;~~
- ~~(B) the line item's unique variable identifier, stored in the transaction database;~~
- ~~(C) the multiple of sales units;~~
- ~~(D) the vendor's unique variable identifier, stored in the vendor database; and,~~

~~the date of purchase.~~

8. (Currently Amended) The method for facilitating commerce in Claim 7, further comprising the steps of:

- ~~e. receiving a vendor's offer to sell a product to one or more of the ~~multiplicity~~ of customers;~~
- ~~f. ~~sorting the demographic data and~~ comparing the vendor's offer against the purchase history data for each one or more of the customers. and, in turn, ~~sorting the multiplicity of~~~~

~~customers by a multiplicity of segments, each segment representing a group of one or more demographic characteristics or purchases;~~

~~g. calculating a statistical score representing "market penetration" of the vendor's offer for each of the multiplicity of segments based upon demographic characteristics and purchase history; and,~~

~~h. sorting the multiplicity of segments by statistical score.~~

9. (Currently Amended) The method for facilitating commerce in Claim 8, further comprising the steps of:

~~i. selecting a threshold score for likely customer acceptance of the vendor's offer; and,~~

~~j. communicating the vendor's offer to those customers whose purchase history data suggest that the vendor's offer is likely to be acceptable. with a statistical score greater than the threshold score.~~

10. (Currently Amended) The method for facilitating commerce in Claim 7 9, further comprising the steps of:

~~i. selecting a threshold score for likely customer acceptance of the vendor's offer;~~

j. calculating the profit the vendor is likely to realize if an offer is accepted;

~~k. calculating the number of units sold the vendor is likely to realize by communicating the vendor's offer to those customers whose purchase history data suggest that the vendor's offer is likely to be acceptable. with a statistical score greater than the threshold score;~~

~~l. calculating the market share the vendor is likely to realize by communicating the vendor's offer to those customers with a statistical score greater than the threshold score;~~

11. (Currently Amended) The method for facilitating commerce in Claim 10, further comprising the steps of:

~~m. selecting values reflecting the acceptable profit and [[,]] the acceptable number of units sold and the acceptable market share the vendor will is likely to realize from the vendor's offer;~~

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~~n. adjusting the terms of the vendor's offer in light of the likely profit and [[,]] number of units sold, and market share so calculated;~~

~~e. repeating steps e through h, and k through n until the profit, number of units sold and the market share most closely meet the selected values.~~

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12. (New) A method comprising:

- a. identifying with a unique identifier one or more customers who effected a purchase;
- b. storing the unique identifier in a customer database;
- c. associating the purchase with the customer's unique identifier;
- d. identifying with a unique identifier a vendor from a vendor database from whom the one or more customers effected the purchase;
- e. dissecting the purchase into one or more component line items;
- f. analyzing one or more component line items to determine the number of sales units purchased;
- g. identifying each component line item by a unique identifier in a transaction database; and
- h. inputting a relational instance in the customer database, wherein the relational instance comprises associations between any two or more of the items selected from the list comprising:
  - i. the customer's unique identifier;
  - ii. the line item's unique identifier;
  - iii. the number of sales units; and
  - iv. the vendor's unique identifier.

13. (New) A data processing system comprising:

a customer database containing information representing one or more actual purchase transactions by one or more customers;

a vendor database containing information about one or more product or service offering by one or more vendors;

a transaction database for storing elemental definitions of salable units;

a matching engine comprising a component for standardizing one or more of the purchase transactions, and one or more of the vendor's offerings, into one or more of the elemental definitions of salable units in the transaction database in common so as to enable comparison of the vendor's offerings against the actual purchase transactions; and

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a component for analyzing one or more of the vendor's offerings in light of one or more of the actual purchase transactions stored in the customer database.

14. (New) A method of targeted marketing comprising:

- a. collecting data from a plurality of consumers' bills;
- b. analyzing the collected data;
- c. predicting purchases the consumers may be likely to make based on the analysis;
- and
- c. designing offers to the consumers based on the predicted purchases.

15. (New) The method of Claim 14, wherein the step of collecting is one selected from the group of data collection methods comprising:

- a. collecting manually entered data;
- b. collecting optical character recognition data;
- c. collecting Screen Scraping data; and
- d. collecting electronic data from a data processing system.

16. (New) The method of Claim 14, wherein the step of analyzing the collected data comprises: encoding the data collected from the bills into standardized constituent parts; and presenting a good or service in terms of basic units independent of the identity of the vendor.

17. (New) The method of Claim 16 further comprising aggregating and comparing offers.



18. (New) The method of Claim 16 wherein the step of designing offers comprises:

encoding data from vendor offers into one or more of the same standardized constituent parts;

comparing the encoded data from vendor offers against the encoded data collected from the bills; and

based at least in part upon that comparison, assembling a list of customers whose collected bill data suggests they are likely to purchase the product or service offered.

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19. (new) A method comprising:

storing at least one extensible transaction in a database, the transaction having flexible representations of product definitions;

retrieving the stored flexible representations using at least one system controller; and

presenting a plurality of interactive scripts to a product vendor to enable the vendor to refine the flexible representations based on actual purchase transaction data.

20. (new) The method of Claim 19, wherein the plurality of interactive scripts further comprises a pricing script that allows the vendor to associate the flexible representations by a combination of multiple commoditized sellable units.

21. (new) The method of Claim 20, wherein the controller further comprises:

a means for comparing one or more of the commoditized sellable units represented by the flexible representations with other commoditized sellable units derived from vendor offers.

22. (new) A system for facilitating electronic commerce between customers and at least one vendor comprising:

a means for creating a customer database, comprising the steps of:

enrolling customers into a closed market;

inputting a unique identifier to one or more of the enrolled customers; and

creating an initial record containing the identity for one or more of the enrolled customers; and

recording purchase history data derived from actual purchases made by one or

more enrolled customers and associating that data with their respective unique identifiers;

a means for creating a transaction database; comprising the steps of:

defining one or more of the products offered by one or more of the vendors;

creating a record corresponding to one or more defined products;

identifying a sales unit appropriate to one or more of the products;

inputting a unique identifier to one or more of the products; and

categorizing one or more of the products, and

a means for creating a vendor database, comprising the steps of:

creating a record corresponding to one or more vendors, and

inputting a unique identifier to one ore more of the vendors.

23. (new) A method to derive an offer based on transaction history, the method comprising:

- a. interposing a data processing system between one or more consumers and one or more vendors;
- b. observing the consumer's buying habits using the data processing system to gather the consumer's bill data;
- c. analyzing the consumer's bill data;
- d. identifying one or more consumer who effected a purchase with a first identifier;

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- e. aggregating the first identifier of one or more consumers into a consumer database;
  - f. associating the purchase with the consumer's first identifier stored in the consumer database;
  - g. identifying a vendor from a vendor database, from whom the consumer effected the purchase by a second identifier associated with the vendor;
  - h. classifying the purchase into one or more component line items;
  - i. determining the number of sales units purchased in each component line item;
  - j. identifying each component line item by a third identifier in a transaction database, and
  - k. inputting a relational instance in the customer database, wherein the relational instance comprises associations between any two or more of the items selected from the list comprising:
    - i. the consumer's first identifier;
    - ii. the line item's third identifier;
    - iii. the number of sales units, and  
the vendor's second identifier.

24. (new) A system to derive an offer based on transaction history, the system comprising:

means for interposing a data processing system between one or more consumers and one or more vendors;

means for observing the consumer's buying habits using the data processing system to gather the consumer's bills or bill payment transaction data;

means for analyzing the consumer's bills or bill payment transaction data;

means for identifying with a first identifier one or more consumers who effected a purchase;

means for aggregating the first identifier of one or more consumers into a consumer database;

means for associating the purchase with the consumer's first identifier stored in the consumer database;

means for identifying a vendor from a vendor database, from whom the consumer effected the purchase by a second identifier associated with the vendor;

means for dissecting the purchase into one or more component line items;

means for analyzing to one or more component line items determine the number of sales units purchased;

means for identifying each component line item by a third identifier in a transaction database, and

means for inputting a relational instance in the customer database, wherein the relational instance comprises associating between any two or more of the items selected from the list comprising:

the consumer's first identifier;

the line item's third identifier;

the number of sales units, and

the vendor's second identifier.

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